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GENERAL MANAGEMENT PLAN
OVERVIEW

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Glacier National Park

WATERTON-GLACIER INTERNATIONAL PEACE PARK
A WORLD HERITAGE SITE

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Dear Friends,

In your hands — literally and figuratively — is the future of Glacier National Park. We have carefully listened to your comments over the past several years and have used them to develop this plan. Our guiding overall management philosophy is to continue to manage Glacier as a classic western national park and "keep it like it is." To do this will be costly and not without controversy.

This overview summarizes the Draft General Management Plan and Environmental Impact Statement. Not everyone will like our alternatives or will agree with our assessments, but we have done our best to air the issues, develop alternative solutions, and select a preferred alternative using the best information available.

We look forward to receiving your comments on this draft plan. All comments received will be considered before a final decision is made. There will be a 90-day comment period. All comments are due by November 14, 1998. If you would like a copy of the complete Draft General Management Plan and Environmental Impact Statement, send your request to: Superintendent, GMP/EIS Project, Glacier National Park, West Glacier, Montana 59936 or call (406) 888-7911. For further information, including a schedule for public meetings, call or visit our website at <http://www.nps.gov/glac>.

Like you, we believe Glacier to be one of the most treasured places in the world and ask you to join with us in charting its future.

Butch Farabee

Butch Farabee
Acting Superintendent



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Introduction



Overview



Glacier National Park is a legacy to the American people and to the world. It allows rare glimpses of the natural world and holds superb examples of western cultural history. It was the world's first international peace park.

The park means different things to different people. For some, its importance is based in its nearly intact complement of native plants and animals. For others, it is a reminder of the human story, beginning before written record and continuing through this country's westward expansion. People have stood for thousands of years beneath these peaks; many nations include them in their cultural legacy. American Indians still revere the mountains that are the spiritual backbone of their world.

Glacier National Park exemplified the value of wilderness long before wilderness became rare. As visitors hike its rugged trails and sleep in its grand lodges and backcountry chalets, they gain more than memories — they take away an appreciation of the wild and a reverence for its beauty. Visitors from many nations can learn how special this place is, and in so doing, they may be able to take some small measure of peace away with them. People from places torn by strife can be inspired by this place where two countries, sharing an undefended boundary, prove that people can work together.

Glacier National Park is part of Waterton-Glacier International Peace Park and is at the apex of the three oceans (a triple divide) that bound the North American continent. The park encompasses 1,013,572 million acres of breathtaking mountain scenery in northwestern Montana. Its jagged peaks and crystalline lakes are remnants of extensive glaciation from the last ice age, and nearly 50 glaciers still remain in the park. The unsurpassed scenery attracts almost two million visitors a year to northwestern Montana.

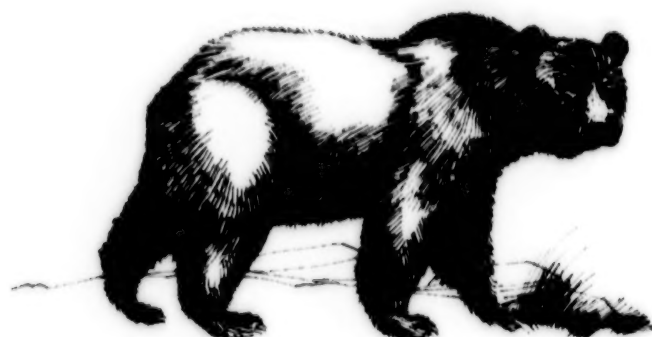
Glacier includes large expanses of wild land and is the relatively undisturbed core of a large ecosystem that supports a wide variety of plants and animals. Glacier is one of the few places in the

Far away in northwestern Montana, hidden from view by clustering mountain peaks, lies an unmapped corner — the Crown of the Continent — slow-moving ice rivers still plow their deliberate ways, relics of mightier glaciers, the stiffened streams which in a past age fashioned the majestic scenery of today.

George Bird Grinnell
Century Magazine, September 1901

Glacier National Park is an investment in the heritage of America. Our primary mission is the preservation of world class natural and cultural resources, allowing us to ensure that current and future generations have the opportunity to experience, enjoy, and understand the legacy of Waterton-Glacier International Peace Park.

Glacier National Park's Government Performance and Results Act mission statement



world where all native predators and most of their prey survive in the wild. Threatened and endangered species find safe haven at Glacier. Gray wolves, grizzly bears, peregrine falcons, bald eagles, and bull trout live in the park.

Glacier has become an increasingly popular destination for visitors with a wide range of abilities and expectations. Visitors to Glacier are able to enjoy the park in their own vehicles and drive the famous Going-to-the-Sun Road across the triple divide and other scenic roads. They choose such recreational activities as horseback riding, canoeing, and fishing; they take boat tours on the lakes and stay in historic hotels or campgrounds. Visitors can hike on 735 miles of trails throughout the park.

This document presents an overview of the *Draft General Management Plan and Environmental Impact Statement* for Glacier National Park. The plan will guide management decisions for the next 20 or more years. It presents a management philosophy and a strategy to guide future decisions. This strategy involves six geographic areas. Each has a management philosophy and management zones; appropriate types of development and activities are described for those zones. The plan then focuses on eight critical issues and alternatives for addressing those issues.

Guiding Principles

The guiding principles that follow would steer most aspects of park management at Glacier National Park. This guidance is consistent with the legislation that established the park, NPS policies, and other laws and directives that form the basis for decision making.

GLACIER'S PURPOSE

In accordance with legislation that established Glacier National Park and subsequent legislation, the purposes of the park are to:

- preserve and protect natural and cultural resources unimpaired for future generations
- provide opportunities to experience, understand, appreciate, and enjoy Glacier National Park consistent with the preservation of resources "in a state of nature"
- celebrate the ongoing peace, friendship, and goodwill among nations, recognizing the need for cooperation in a world of shared resources

GLACIER'S SIGNIFICANCE

Significance statements explain Glacier's importance relative to its natural and cultural heritage. They describe the park's distinctive qualities and place them in their regional, national, and international contexts.

- Glacier's scenery dramatically illustrates an exceptionally long geologic history and the many physical processes associated with mountain building and glaciation.

Glacier has the finest assemblage of visible ice age alpine glacial features in the contiguous 48 states, and it has relatively accessible, small-scale active glaciers.

Glacier provides an opportunity to see evidence of one of the largest and most visible overthrust faults in North America, exposing well-preserved Precambrian sedimentary rock formations.

Glacier is at the apex of the continent and is one of the few places in the world that has a triple divide with water flowing to three different oceans.

- Glacier offers relatively accessible spectacular scenery and increasingly rare primitive wilderness experiences.

The Going-to-the-Sun Road is one of the most scenic roads in North America and is a national historic landmark.

Glacier's backcountry offers a challenging primitive wilderness experience.

- Glacier is at the core of the Crown of the Continent ecosystem, one of the most ecologically intact areas remaining in the temperate regions of the world.

In response to wide variations in elevation, climate, and soils, five distinct vegetation zones overlap in Glacier and have produced strikingly diverse habitats that sustain plant and animal populations, including numerous threatened and endangered, rare, and endemic species.

Glacier is one of the few places in the contiguous 48 states that continues to support natural populations of all indigenous carnivores and most of their prey species.

Glacier provides an outstanding opportunity for ecological management and research in one of the largest areas where natural processes predominate. As a result, the park has been designated as a biosphere reserve and Waterton-Glacier International Peace Park is now a world heritage site.

- Glacier's cultural resources chronicle the human activities (prehistoric people, American Indians, early explorers, railroad development, and modern use) that show that people have long placed high value on the area.

American Indians had a strong spiritual connection with the area long before its designation as a national park. From prehistoric times to the present, American Indians have identified places in the area as important to their heritage.

The park's roads, chalets, and hotels symbolize early 19th century western wilderness experiences. Some of these historic structures are still in use today.

The majestic landscape has a spiritual value for all human beings — a place to nurture, replenish, and restore themselves.

■ **Waterton-Glacier is the world's first international peace park.**

The serenity and natural scenic beauty of Waterton-Glacier International Peace Park symbolizes to the rest of the world that peace can be achieved through cooperation and goodwill.

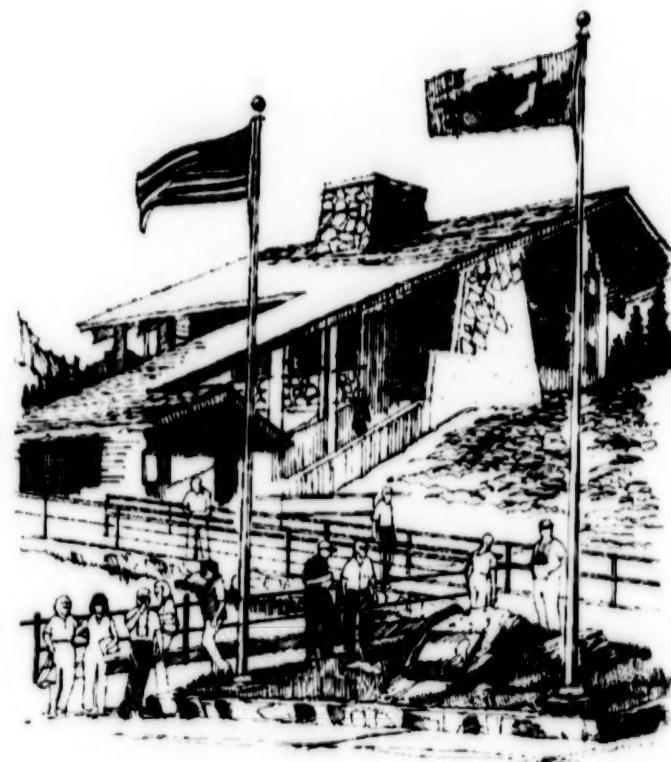
Glacier National Park and Waterton Lakes National Park offer an opportunity for both countries to peacefully cooperate to resolve resource issues that cross the international boundary.

WATERTON-GLACIER INTERNATIONAL PEACE PARK

Glacier National Park and Waterton Lakes National Park together are the world's first international peace park. In 1932, largely through the work of the Alberta and Montana chapters of Rotary International, the Canadian Parliament and the United States Congress designated the two parks as Waterton-Glacier International Peace Park. This honor fosters the long relationship and the goodwill between Canada and the United States. The peace park illustrates the need for cooperation in a world of limited resources. It is a symbol of the peace shared by two great nations and serves as an example for others to work for peace for all people.

WORLD HERITAGE SITE

In 1995 the Waterton-Glacier International Peace Park was designated as a world heritage site, which recognizes that the area has great value to people throughout the world. The recognition provides greater protection for resources because Canada and the United States have agreed to refrain from measures that could damage the other country's world heritage site. They have also each agreed to take measures necessary within their own laws to protect their own sites





BIOSPHERE RESERVE

In 1976 Glacier National Park was designated as a biosphere reserve under the Man and Biosphere Programme of the United Nations Educational, Scientific, and Cultural Organization. Waterton Lakes National Park was designated three years later. The two main tenets of the Man and Biosphere Programme are preservation and sustainable ecosystems.

PROPOSED WILDERNESS

A wilderness study for Glacier was conducted, and findings were presented to Congress in 1974. Approximately 95 percent of the park was identified as suitable for preservation as wilderness in the national wilderness preservation system. However, Congress has not formally designated any land in Glacier as wilderness. Policy requires that the proposed wilderness land in Glacier be managed as wilderness until such time as Congress either formally designates the land as wilderness or rejects the designation.

[Proposed wilderness areas] shall be administered for the use of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness areas...

INTERPRETIVE, EDUCATIONAL, AND OUTREACH PROGRAMS

One goal of the National Park Service is to connect parks to people by offering the highest quality services possible. These interpretive, educational, and outreach programs provide understanding and support for preservation of park resources and facilitate thoughtful use of park lands.

None of this can be accomplished without the help of others. Educational partners include Waterton Lakes National Park, Glacier Natural History Association, Crown of the Continent Environmental Education Consortium, the U.S. Forest Service, local school districts, universities, the tourism industry, chambers of commerce, civic groups, clubs, and organizations. There is an ongoing formal relationship between Glacier National Park and the Glacier Institute, a local non-profit educational organization.

PRESERVATION OF NATURAL RESOURCES

Natural resources would be managed “to understand natural processes and human-induced effects; mitigate potential and realized effects; monitor ongoing and future trends; protect existing natural organisms, species populations, communities, systems, and processes; and interpret these organisms, systems, and processes to the park visitor” (*NPS Management Policies*). Natural resource management programs would be conducted in a cooperative spirit with other agencies and landowners and would include research, mitigation, monitoring, and protection.

PRESERVATION OF CULTURAL RESOURCES

Glacier National Park is the steward of some of America’s most important cultural resources. In accordance with the Organic Act of 1916, which established the National Park Service, Glacier National Park is charged to preserve the resources unimpaired for the enjoyment of present and future generations. If these resources are degraded or lost, so is the essence of Glacier. Cultural resources, including museum collections, would be managed in accordance with NPS guidelines through conducting research, planning, and stewardship.

AMERICAN INDIAN RELATIONS

Glacier, like many national parks, was recognized as a special place long before it was formally designated as part of the natural heritage of the United States. American Indians still revere Glacier and did so long before contact with European people. The park has many sites that are sacred to nearby tribes.

The first formal treaties between these tribes and the United States were in 1855. While these treaties had many purposes, they resulted in the cession of land to the United States and the reservation of land for the tribes.

Park management would continue to work with the Confederated Salish and Kootenai Tribes to protect traditional values. Where contemporary goals are mutual, an effort would be made to use the authorities granted the tribe under its self-governance status. The park would continue to work with the Blackfeet Tribe to recognize tribal rights and to work toward resolution of issues on which there has not been complete agreement. In addition, the park would continue to work proactively



with tribal governments on economic development in cases where such activities serve national park objectives and needs.

MANAGING IN AN ECOSYSTEM ENVIRONMENT

Glacier cannot achieve its resource goals without the cooperation of its neighbors. Neither can the park staff forget that actions in the park can have impacts beyond park boundaries. The National Park Service is committed to cooperating with other agencies and adjacent landowners to avoid adverse impacts on park resources from adjacent land uses and to avoid adverse impacts on adjacent land caused by park management.

FIRE MANAGEMENT

Throughout the 20th century fire management policy has evolved in response to land and resource management needs, the growing knowledge of the natural role of fire, and the increased effectiveness of fire suppression. Fire in Glacier National Park is managed to achieve a balance between suppression to protect life, property, and resources and its use to achieve healthy ecosystems. Glacier would use the full range of fire management, from aggressive suppression to management-ignited fires with very specific weather and fuel prescriptions, to achieve desired goals and specific resource objectives.

RESEARCH

One goal of research in Glacier National Park is to provide a sound basis for decisions. Glacier provides a nearly pristine location for scientists to improve human understanding of physical, biological, and cultural resources. Science should contribute to the general body of knowledge. The National Park Service places particular research emphasis on conservation of biodiversity and genetic resources, on detection of ecosystem changes, and on thought that could be applicable to biosphere reserves in other regions of the world.

Research in the park must comply with policy and help achieve Glacier's scientific and resource management goals. It cannot harm park resources. In most instances research cannot be overly intrusive on wildlife, easily visible to visitors, or in conflict with the goals of other park projects.

Management Philosophy and Geographic Areas



DEVELOPMENT OF THE DRAFT GENERAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

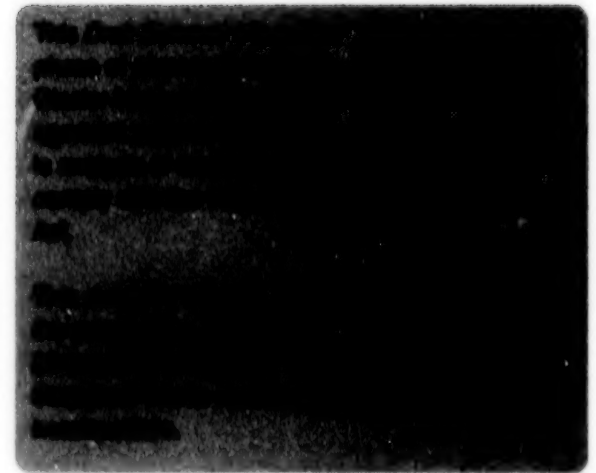
Glacier National Park began this project in March 1995. At that time a letter to the public announced that a new general management plan would be prepared. Initially, two newsletters were sent to the public and nine open houses were held in the region. The Blackfeet Tribal Council, the Salish-Kootenai Culture Committees, and the Flathead and Lewis and Clark National Forests (among others) were consulted. Over 2,300 comments were received. Although a range of comments was received, the general tone of most of those first observations favored limited growth in the park and removing facilities to enhance wilderness values. Some encouraged park management to move development out of the park and to restrict the number of visitors to prevent overcrowding. Many stated that Glacier is a special wild area that must be preserved.

Guided by the public sentiment expressed after the initial publications and open houses, a third newsletter offered three preliminary alternatives for managing Glacier National Park. Twelve public meetings were then held in Montana and Canada, all of which attracted concerned local residents and considerable media attention. Between July 1996 and fall 1997 over 1,600 people responded to the ideas of that third newsletter. The majority disagreed with many of the ideas in Newsletter 3. The National Park Service considered public comment and has developed the following strategy and alternatives for review.

General Philosophy for Managing Glacier

The overwhelming majority of the people who commented during the development of this *General Management Plan* have indicated that they would like to "keep Glacier the way it is." Public input has emphasized that Glacier National Park should be managed to retain its classic western national park character.

The overall guiding philosophy is to manage large portions of the park for their wild character, while continuing traditional visitor services and facilities in areas that have historically supported those uses. Visitors would be able to embrace the wildness of the park from many vantage points. Visitor use would be managed to preserve resources and provide opportunities to experience, understand, study, and enjoy the park. Cooperation with park neighbors would be emphasized in managing use and resources.





With this overall philosophy in mind, a strategy was developed to guide management decisions over the next few decades. This strategy recognizes the singular character of individual geographical areas in the park and the suitability of various zones in these areas for a range of visitor experiences. For example, some areas of the park are better suited for intensive visitor uses and development (such as the Going-to-the-Sun Road corridor), while other areas are more suited to backcountry experiences (such as the North Fork).

GEOGRAPHIC AREAS

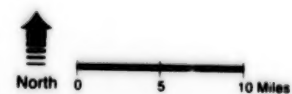
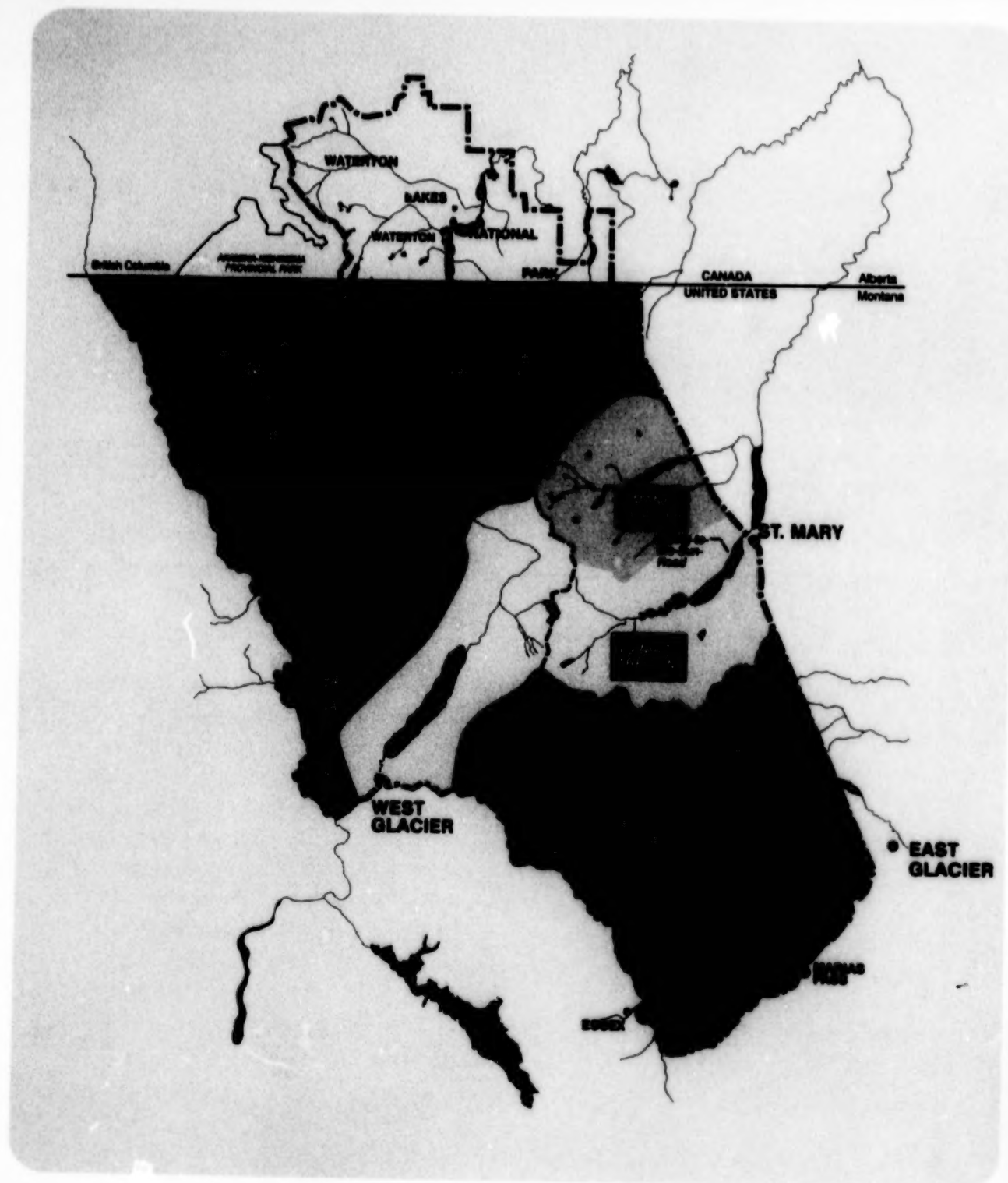
The park has been divided into six geographic areas, each with its own management philosophy: Many Glacier, Goat Haunt-Belly River, the Going-to-the-Sun Road corridor, Two Medicine, Middle Fork, and North Fork.

MANAGEMENT ZONES

The six geographic areas are divided into management zones. The four management zones are visitor service, day use, rustic, and backcountry. Each has a different set of desired resource conditions and visitor experiences, management activities, and development.

Visitor Service Zone

This zone includes developed areas, paved roads, and campgrounds with potable water and sanitation facilities. Natural resources would be managed to protect visitor health and safety, promote enjoyment of the setting, and mitigate the effects on surrounding areas. In this zone a range of services and facilities would continue to be provided to support the visitors' ability to experience the recreational and scenic opportunities in the surrounding area. Visitors would find a social, relatively safe, and comfortable atmosphere for sightseeing, trip planning, visiting with family and friends, and relaxation. The focus would be on providing educational and interpretive opportunities. Lakes in this zone would be managed for a high level of use, including large tour boats and motorized craft. Most facilities would be fully accessible to people with disabilities. Cultural resources would be managed to preserve historic districts, landmarks, and national register properties and the elements that contribute to their designations. Visitors could expect congested conditions.



**GENERAL
MANAGEMENT PLAN
GEOGRAPHIC AREAS**



Day Use Zone

This zone includes selected areas that visitors could reach easily within a day from visitor use zones. Natural resources would be managed to ensure a high degree of resource integrity, enhanced by the proper location and design of trails and facilities. Natural processes would be allowed to proceed unimpaired to the extent possible with relatively high levels of use. Resource degradation would not be allowed outside the trail corridor. Some parts of this zone would be in the park's proposed wilderness. Travel could be by boat, foot, or horseback. Trails could be developed for people with disabilities, and the standards of trail maintenance would be high. Wider travel surfaces and tread improvements would accommodate a higher level of use while protecting resources. There would be a high encounter rate with other people in this zone. Docking areas would be provided on selected lakes. Conflicts between visitors and wildlife would be managed by exploring a range of strategies from relocation to closure; the goals are to protect wildlife and provide for visitor safety. A quality experience would continue with interpretive hikes to identified destinations as a principal activity and other educational interpretation would be encouraged. Cultural resources would be preserved and protected.

Rustic Zone

This zone includes primitive facilities and campgrounds representative of early park development and visitor experiences in Glacier National Park. Modest impacts on natural resources would be tolerated, mostly near campgrounds and other facilities. Travel along road corridors is intended to be slow; there would only be limited improvement to surfaces and corridors. This would enhance wildlife security where roads are extensively used by many species. The facilities also serve as frontcountry staging areas for use of the surrounding wilderness. While modest in scale, this zone would allow understanding and appreciation of both the human and natural histories of the park. Most facilities in this zone would be fully accessible. Visitors would find a slow-paced atmosphere and could learn about the backcountry. Natural quiet would predominate. Fewer visitors would be encountered than in the visitor service zone. Cultural resources would be managed to preserve historic values. Conflicts between visitors and wildlife would be managed by strategies ranging from relocation to closure of an area. No concession facilities would be permitted in this zone.

Backcountry Zone

Management of natural resources would focus on protection and restoration of natural processes. The visitor experience would be characterized predominantly by pristine natural conditions with some primitive facilities such as trails and campsites. It would offer outstanding opportunities for visitors seeking solitude. Natural quiet would predominate. The expectations of the users would be for few encounters with other users most of the time and for a variety of hiking and climbing experiences. Impacts on natural resources would be confined to trail corridors and designated camping areas. Cultural resources would be preserved and protected in accordance with the law and policy. Formal interpretive and educational opportunities would be minimal and in keeping with the qualities desired for this zone. Conflicts between visitors and wildlife would be managed to minimize disturbance to wildlife, yet provide for visitor safety. In most cases, trails would be closed to visitors when dangers arose. Animals would rarely be removed from the area. No commercial activity would be allowed off trail.

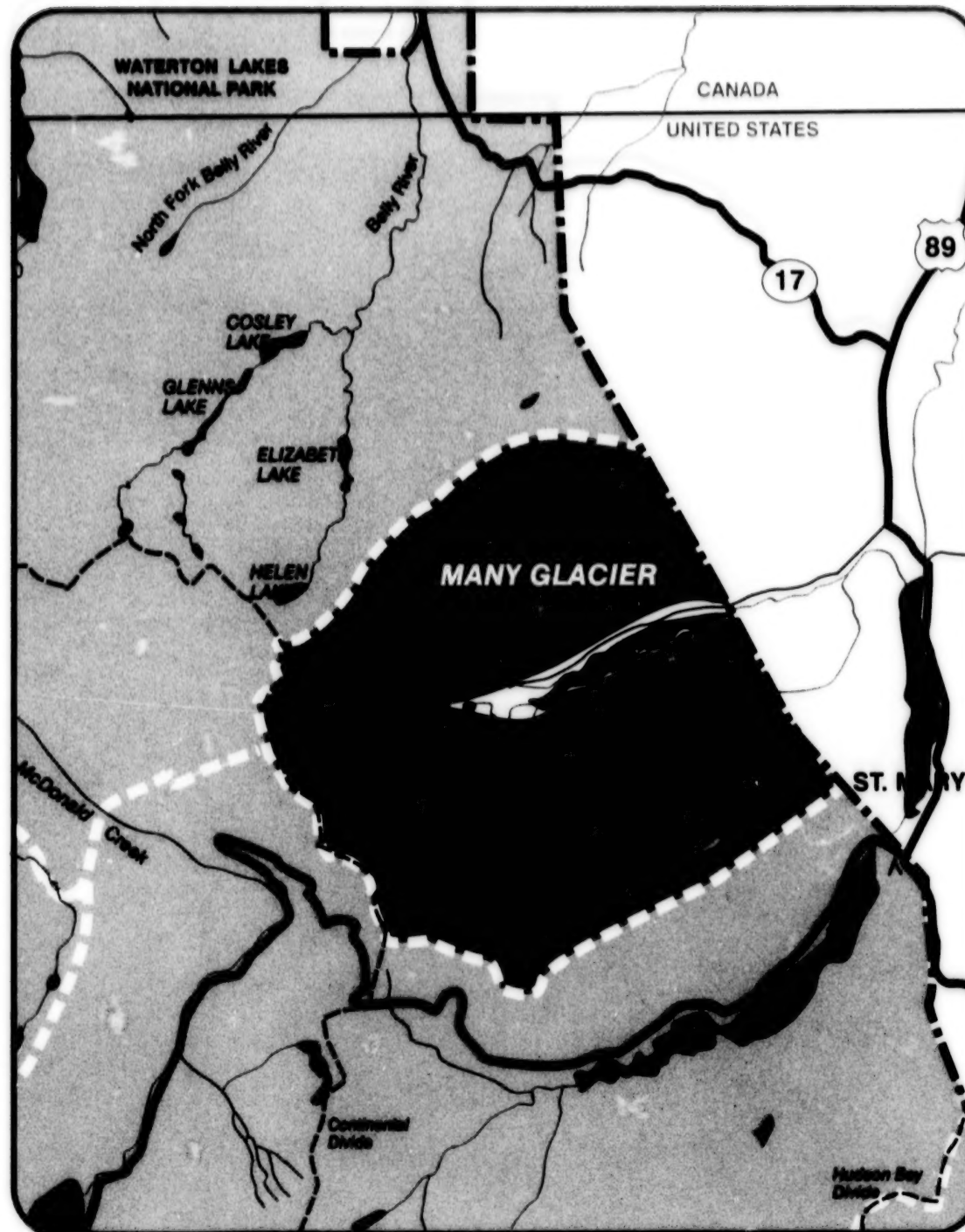


-  VISITOR SERVICE ZONE
-  DAY USE ZONE
-  BACKCOUNTRY ZONE



MANY GLACIER

GLACIER NATIONAL PARK
 United States Department of the Interior • National Park Service
 GPO • JUNE 68 • 117 • 81-2824





Many Glacier

On the eastern edge of the park massive glaciers have carved a series of U-shaped valleys that converge as tributaries to the broad floor of the Many Glacier Valley. As the glaciers receded, the valley floor became a western extension of the prairie grassland to the east, offering a direct entry to a mountain world of towering snow-covered peaks, cold mountain streams, crystalline lakes, and alpine valleys.

The grasslands of Many Glacier Valley provide excellent summer and winter range for elk, mountain goats, deer, bighorn sheep, grizzly bears, and wolves. At the intersection of the five tributary valleys, the Many Glacier Valley also serves as a major wildlife migration corridor.

In the first decades of this century, the Great Northern Railroad sought to develop the area as a tourist destination. The largest of the park's grand old hotels, the Many Glacier Hotel, was built in 1914 on the shore of Swiftcurrent Lake. As the reputation of Many Glacier grew, Swiftcurrent Motor Inn and campgrounds were provided as well.

PHILOSOPHY: Many Glacier would be managed to preserve its wild character while providing visitors with opportunities to experience such activities as observing wildlife, hiking, camping, and sightseeing. Nationally significant historic resources would be preserved and managed to maintain the grand hotel and family lodge traditions.

How this area would be managed:

- Resources would be managed to prevent degradation of high quality habitat, including winter range, and to prevent conflicts with visitor use.
- Two separate developed areas, Swiftcurrent and the Many Glacier Hotel, would be managed to provide traditional visitor services as well as support services for concession operations.
- Some of the area would be managed to accommodate high levels of day use, while the rest would provide greater solitude and fewer visitor encounters.
- Many Glacier would be divided into a visitor service zone, a day use zone, and a backcountry zone.

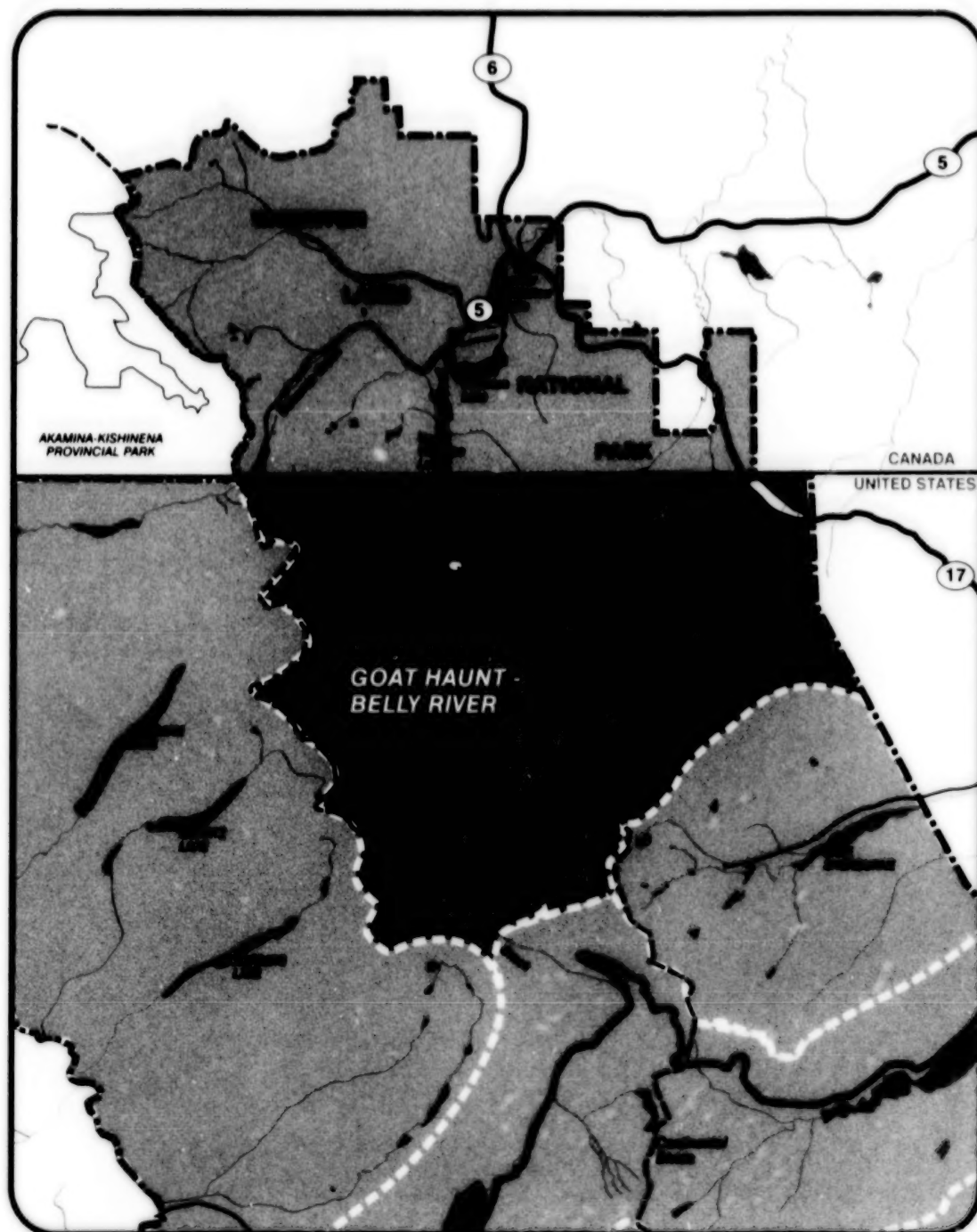
The visitor service zone would include the roads and two developed areas. It would be managed to continue to provide a range of services and facilities, including food, gift shops, ranger stations, campstores, and overnight accommodations. Significant cultural resources would be managed to preserve historic structures and their traditional uses and to retain their ambiance. A range of developments would continue in this zone from hotels to administrative structures for park and concession management.

The day use zone would include Swiftcurrent Lake and trails and Josephine Lake and trails, trails to Apikuni and Red Rock Falls, Grinnell Lake, and Iceberg Lake. It would be managed for traditional recreational experiences such as hiking, boat tours, and horseback rides. Conflicts between hikers and horse users would be reduced. Interpretive services such as guided hikes and exhibits would be available. Development would be limited to trails, signs, waysides, bridges, boardwalks, overlooks, and sanitation facilities. Social and resource indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.

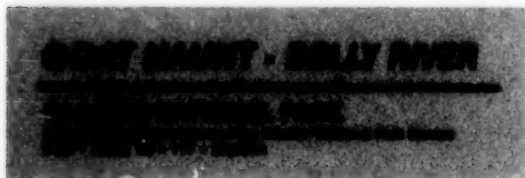
The backcountry zone would encompass the remainder of the Many Glacier area. It would be managed to maintain natural processes. Visitor use would consist mostly of hiking and camping, and "leave no trace" ethics would be encouraged. Development would be restricted to trails, primitive signs, campsites, sanitation facilities, and other low-impact developments. Historic structures would be maintained. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.



-  VISITOR SERVICE ZONE
-  DAY USE ZONE
-  BACKCOUNTRY ZONE



North 0 5 10 miles





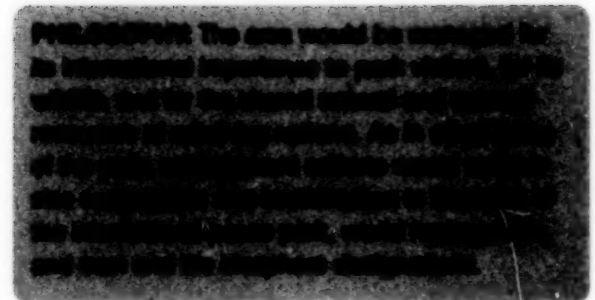
Goat Haunt-Belly River

Adjacent to Waterton Lakes National Park, Goat Haunt is a pristine area that epitomizes the international peace park status of Waterton-Glacier. The area possesses a long undefended international boundary. It provides refuge for wildlife that depend on habitats on both sides of the border, reinforcing the international nature of the area.

The significance of Goat Haunt as a resource for visitors is that it remains largely unspoiled. Visitors find a spectacular resource with few facilities or amenities; there are only primitive trails, an early homestead, and backcountry campsites. The area has many archeological sites because the mountain passes have long been used by American Indians. Chief Mountain is important to contemporary American Indians.

How this area would be managed:

- Resources would be managed to protect the pristine character of the area and the integrity of biological communities.
- No overnight accommodations or food services would be provided at Goat Haunt.
- Visitor use would be supported by the full range of services at Waterton Townsite. Boat landings, visitor orientation, information and interpretation services, backcountry access, and administrative facilities would be at Waterton Townsite, at Goat Haunt, and along the Chief Mountain Highway.





- The international peace park and world heritage site designations would be emphasized as primary interpretive themes.
- The Goat Haunt-Belly River area would be divided into a visitor service zone, a day use zone, and a backcountry zone.

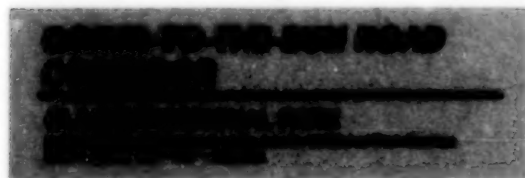
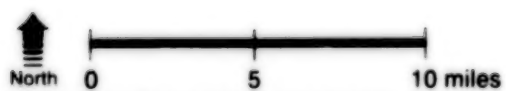
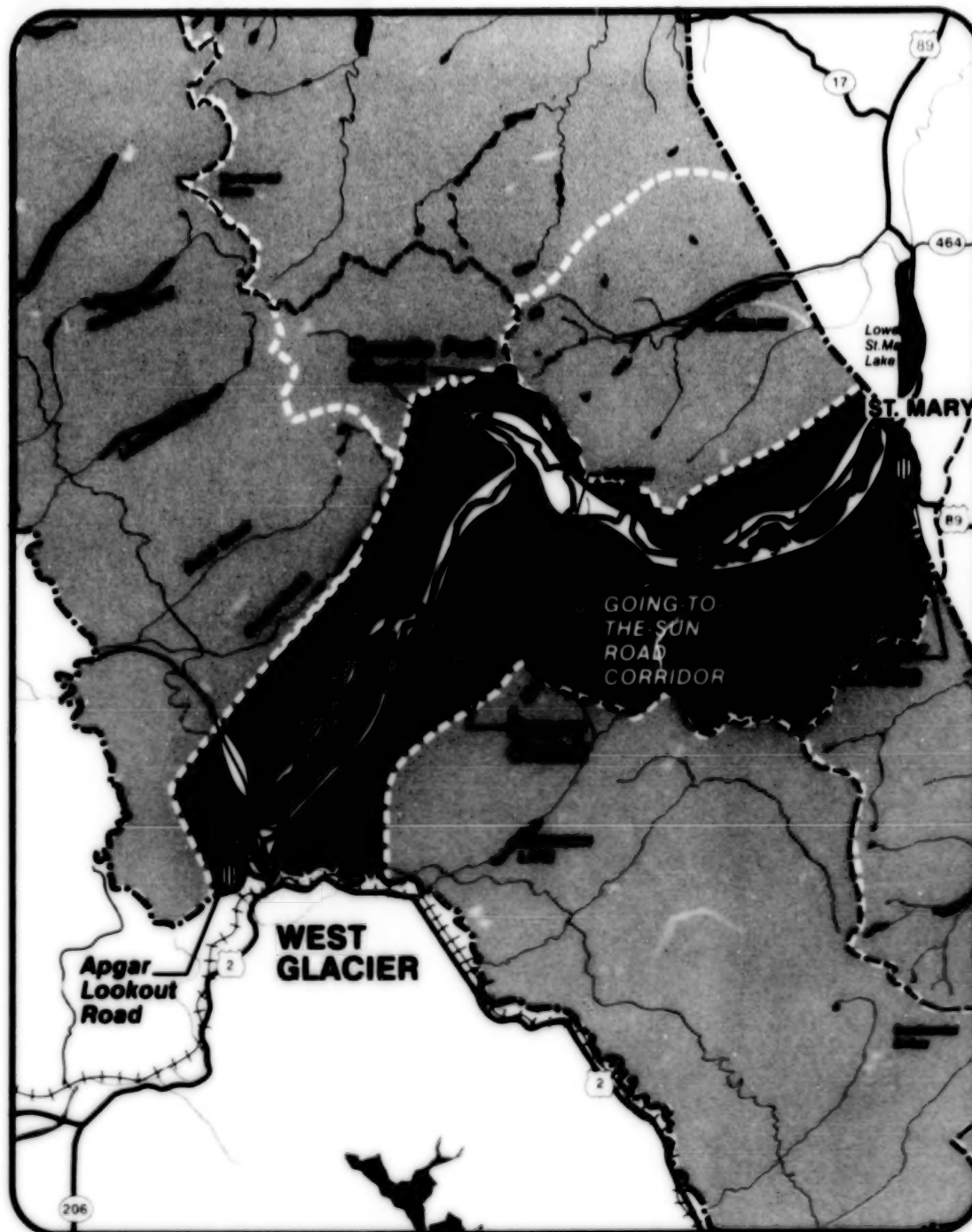
The visitor service zone at Goat Haunt and along the Chief Mountain Highway would be managed as staging areas for access to the surrounding backcountry. Services would be limited to providing information and interpretation as well as customs and immigration. Development would be limited to that necessary to support those functions. Interpretive needs would be met with kiosks, exhibits, and personal services.

The day use zone in the Goat Haunt-Belly River area would include Waterton Lake and the lakeshore trail, the trail to Goat Haunt overlook, the trail to Rainbow Falls, and the trail to the Belly River Ranger Station. It would be managed to continue the traditional boat tours and guided hikes. Developments would be limited to trails, bridges, overlooks, and sanitation facilities. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected. Cultural resources would be protected.

The backcountry zone would encompass the remainder of the Goat Haunt-Belly River area. It would be managed to maintain natural processes. Visitor uses would be hiking, horseback riding, and backcountry camping. "Leave no trace" skills and ethics would be encouraged. Developments would include trails, campsites, primitive signs, sanitation facilities, and patrol cabins. Historic structures would be maintained. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.



-  VISITOR SERVICE ZONE
-  DAY USE ZONE
-  BACKCOUNTRY ZONE
-  RUSTIC ZONE





Going-to-the-Sun Road Corridor

Bisecting Glacier National Park, the Going-to-the-Sun Road corridor allows convenient access to the park's many and varied resources that in many ways define the park. The road begins in the heavily wooded enclosed landscape of Lake McDonald, proceeds through an open, expansive alpine area at Logan Pass, and ends in the drier forests and prairies of the eastern slope. Designed as a one-of-a-kind driving experience, the Going-to-the-Sun Road is traveled by thousands of people every year who enjoy the independence and choices offered.

Extraordinary in design and a remarkable engineering achievement, the Going-to-the-Sun Road is recognized as a national historic landmark. The alignment and width, masonry guardrails and retaining walls, carefully designed pullouts, and bridges all demonstrate the approach of defining the park experience through road design. Visitor facilities are available along the road corridor.

The natural resources of the Going-to-the-Sun Road corridor reflect a broad range of elevations, vegetation types, and habitats. The variety of wildlife is exceptional and the area has the largest concentrations of rare plants in the park.

How this area would be managed:

- The tremendous biological diversity found in this corridor would be protected to ensure its overall integrity.

PROLIFERATION: The Going-to-the-Sun Road corridor would be managed to provide a balance of natural resources, historic and cultural resources, and scenic resources. The corridor would be managed to provide a balance of natural resources, historic and cultural resources, and scenic resources. The corridor would be managed to provide a balance of natural resources, historic and cultural resources, and scenic resources.

- A full range of visitor services would be provided at Apgar Village, Lake McDonald Lodge (a national historic landmark), Rising Sun, and at St. Mary.
- Sperry and Granite Park Chalets (national historic landmarks) would provide traditional accommodations.
- As a national historic landmark, the Going-to-the-Sun Road would be managed to allow opportunities for visitors to experience the park's magnificent scenery and historic character.
- The Going-to-the-Sun Road corridor would be divided into a visitor service zone, a rustic zone, a day use zone, and a backcountry zone.

The visitor service zone includes the road corridor, adjacent developed areas, and administrative facilities. They would be managed to provide the traditional recreational opportunities for which the road was designed. Driving the Going-to-the-Sun Road would remain one of the premier visitor experiences of Glacier National Park. The corridor would continue to accommodate interpretive opportunities, overnight use, food services, boat tours, hiking, and horseback riding. The road and Lake McDonald Lodge would be managed as a historic resource in keeping with their national landmark status. Other historic properties would be managed to preserve their historic qualities. Development would serve a broad range of visitor facility, concession, and park administrative needs.

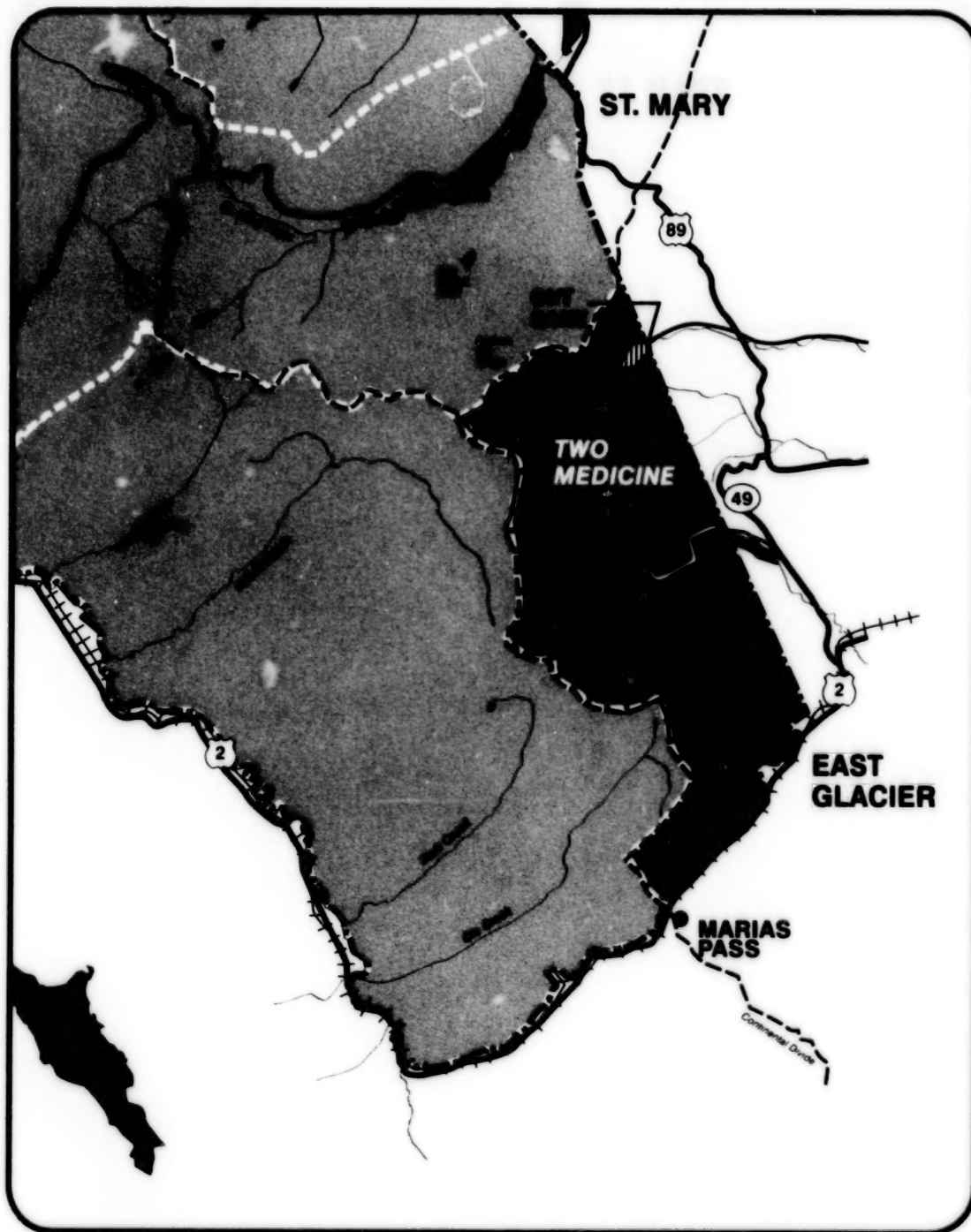
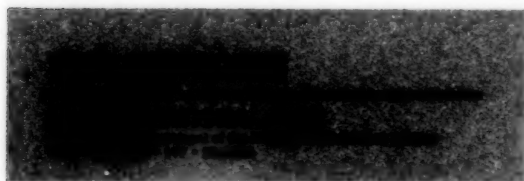
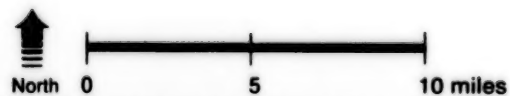
The day use zone would include such popular trails and locations as the Highline Trail, trails to Avalanche Lake, McDonald Falls, St. Mary Falls, and Sperry and Granite Park Chalets. Recreational opportunities such as hiking, boat tours, and horseback rides would be available. Conflicts between hikers and horse users would be minimized. Interpretive activities would include orientation to the park at the two primary entrances, guided walks, and modest exhibits. While this zone would be managed to serve a larger number of visitors than the adjacent backcountry, management of natural resources would seek to achieve nearly pristine conditions. Developments would be restricted to interpretive waysides, directional signs, trails, boardwalks, bridges, and sanitation facilities. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.

The rustic zone in the Going-to-the-Sun Road area would include the Apgar Lookout Road; the 1913 Ranger Station, and the Quarter-Circle Bridge. Management would concentrate on adaptive use of historic structures. There would be minimal interpretive services and exhibits. Development would be limited to sanitation and administrative facilities, small parking lots, trails and trailheads, and unpaved roads.

The backcountry zone would be managed to maintain natural processes. Visitor use would consist primarily of hiking, horseback riding, and camping, and visitors would be encouraged to practice "leave no trace" skills and ethics. Development would be limited to trails, campsites, and sanitation facilities. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.



-  VISITOR SERVICE ZONE
-  DAY USE ZONE
-  BACKCOUNTRY ZONE
-  RUSTIC ZONE





Two Medicine

The Two Medicine area has dramatic mountain and prairie scenery with both natural and cultural features. It has important geological attractions (the Lewis overthrust) and also provides important habitat for wildlife and plants. Two Medicine borders the early railroad alignment and is one of the last remaining links to Glacier's railroad-sponsored tourism and the development of lodges and chalets. The Blackfoot Indians retain a strong cultural tie to the area.

How this area would be managed:

- Resources would be managed to protect the wild character of the area, particularly the area of transition between plains and mountains.
- While Two Medicine is a developed area, it would remain small and would not provide all services.
- The Two Medicine area would be divided into visitor service, day use, rustic, and backcountry zones.

The **visitor service zone** includes the entrance road, picnic area, campground, ranger station, concession facilities, and administrative support. It would continue to provide traditional recre-

PROS/CONS: The area would be managed to preserve its extremely significant resources, all channels, and important wildlife habitat. Preserving and enhancing existing roads, trails, and other services would be essential to the Two Medicine Valley.

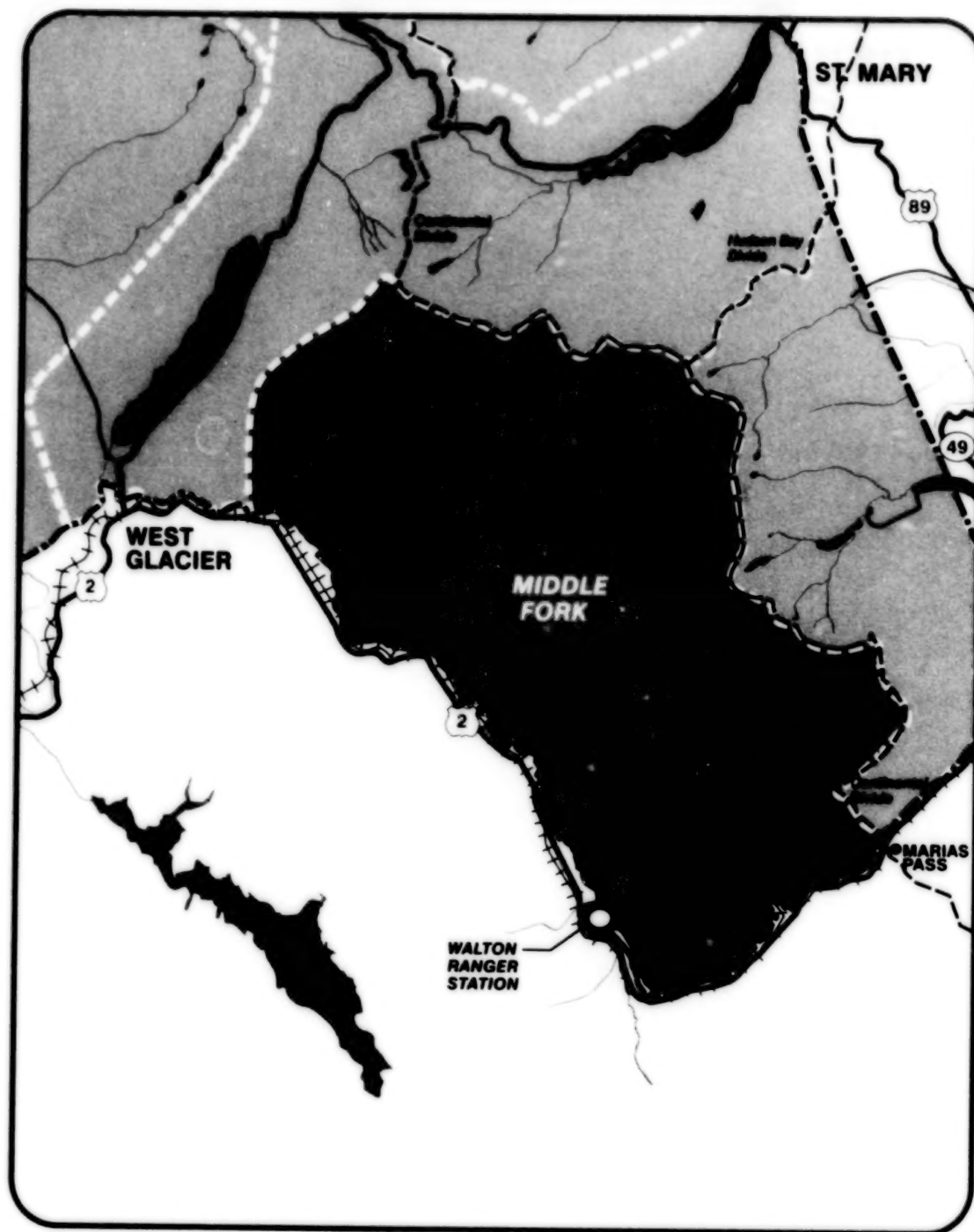
ational and visitor services, including camping. Adaptive use of the historic lodge could include overnight accommodations.

The day use zone would include Two Medicine Lake and its associated trails. It would be managed to provide such traditional recreational uses as hiking and boat tours. Interpretive services such as guided hikes would continue. Development would be limited to interpretive exhibits, waysides, signs, overlooks, trails, boardwalks, bridges, and sanitation facilities. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.

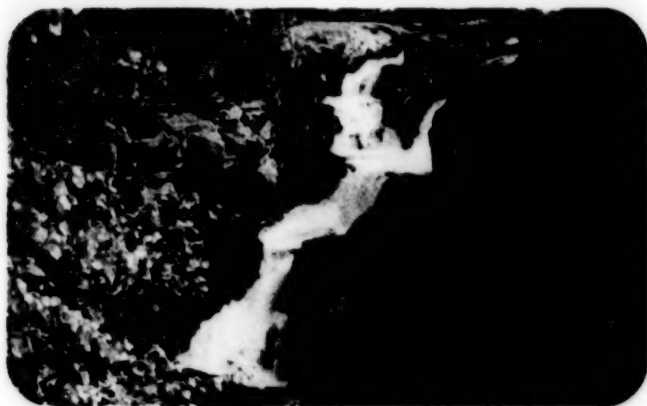
The rustic zone encompasses the Cut Bank Road, ranger station, and campground. This zone would be managed to provide interpretive services and exhibits that describe early use of the area. Historic resources and traditional uses would be preserved. Development would be limited to primitive campgrounds, sanitation facilities, administrative offices, park employee housing, small parking lots, trails and trailheads, and unpaved roads.

The backcountry zone would be managed to maintain and understand natural processes. Visitor use would primarily consist of hiking and camping, and visitors would be encouraged to practice "leave no trace" skills and ethics. Development would be limited to trails, campsites, sanitation facilities, and primitive signs. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.





CLARKSON NATIONAL PARK
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Middle Fork

Although bordered by the Highway 2 corridor, the railroad alignment, and the Middle Fork of the Flathead River, most of the Middle Fork remains isolated because there is no road or bridge access. It offers some of the most remote and challenging wilderness experiences in Glacier. The Middle Fork provides summer and winter range for a variety of species, wildlife travel corridors, and important raptor habitat.

How this area would be managed:

- Resources would be managed to preserve their remote and pristine character; visitor access and trail facilities would be limited and challenging in most of the area.
- Trails, sanitation facilities, hitching posts, primitive signs, and campsites would be the only development allowed in the backcountry.
- Key wildlife areas and travel corridors would be protected and interpreted through cooperation with others where appropriate.
- The Walton Ranger Station would serve the management and visitor needs of the area.
- A portion of the backcountry would be managed to allow for camping in undesignated areas and to provide more opportunities for off-trail travel.
- The Middle Fork area would be divided into a visitor service zone and backcountry zone.

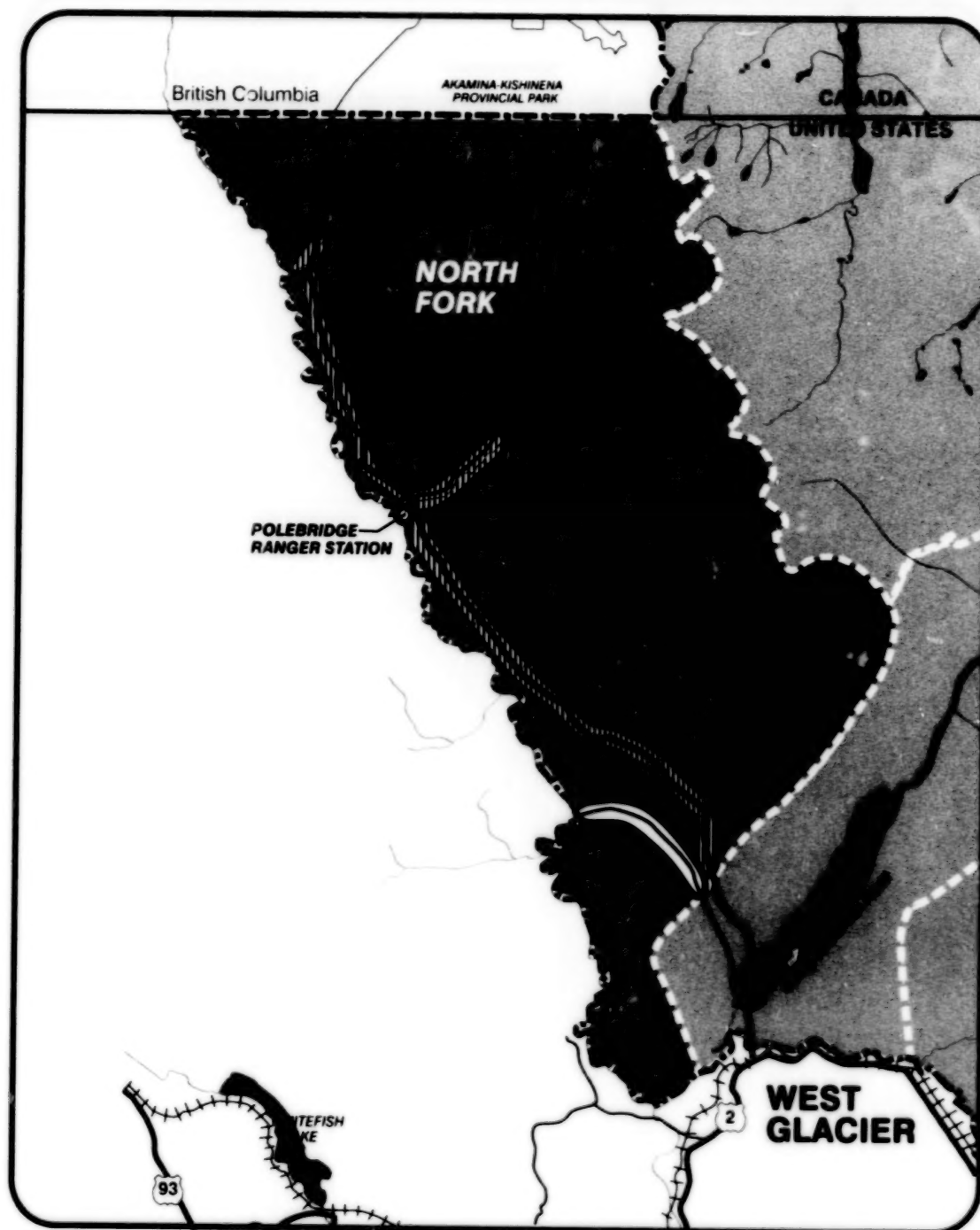
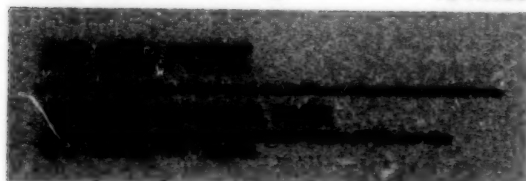
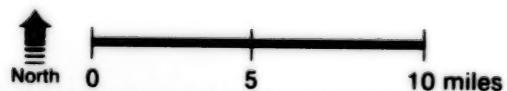
PHILOSOPHY: The area would be managed to preserve its remote and wild character through a range of primitive visitor experiences. Visitor and administrative facilities would only be allowed along Highway 2.

The visitor service zone would include the Highway 2 corridor, the Walton Ranger Station, and Goat Lick. It would be managed to provide information and interpretive services. Developments would include the highway, signs, trails, trailheads, waysides, sanitation facilities, parking lots, pullouts, picnic areas, exhibits, and staging areas.

The backcountry zone would constitute the majority of the Middle Fork area and would be managed to maintain natural processes. Visitor use would consist primarily of hiking, horseback riding, and backcountry camping, and visitors would be encouraged to practice "leave no trace" skills and ethics. Development would include trails, sanitation facilities, and campsites. A portion of the backcountry would be managed to allow camping in undesignated areas. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.



-  VISITOR SERVICE ZONE
-  RUSTIC ZONE
-  BACKCOUNTRY ZONE





North Fork

The North Fork, in the northwestern part of the park bordering Canada, has a landscape dominated by water and mountain peaks. The North Fork remains critical to wolf populations and their recovery in the United States and provides important habitat for many other species, including some that are rare elsewhere. Because of its outstanding qualities, the North Fork of the Flathead River has been added to the wild and scenic river system.

How this area would be managed:

- Resources would be managed to preserve the wild character of the area and its important links to the North Fork Valley, including the international portion, for wildlife conservation.
- Commercial development or new commercial activities would not be permitted.
- Small primitive campgrounds would continue at Kintla Lake, Quartz Creek, Bowman Lake, and Logging Creek.
- The inside North Fork Road would remain narrow and unpaved.
- The North Fork would be divided into visitor service, rustic, and backcountry zones.

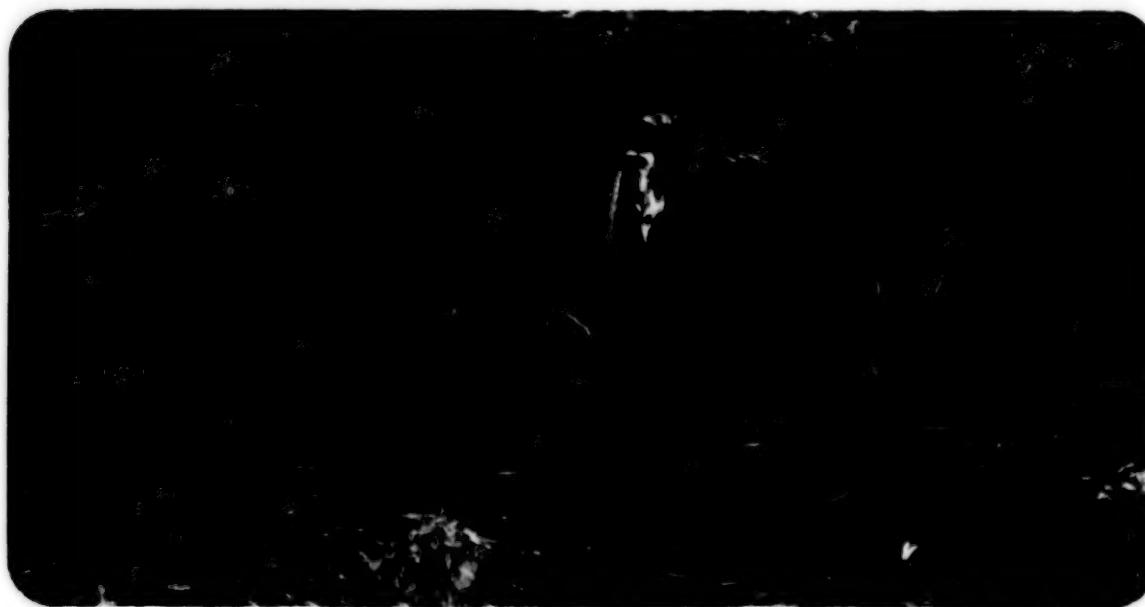
The visitor service zone would encompass the corridor of the Camas Road, Polebridge, and Huckleberry Nature Trail. It would be managed to provide informational and interpretive services

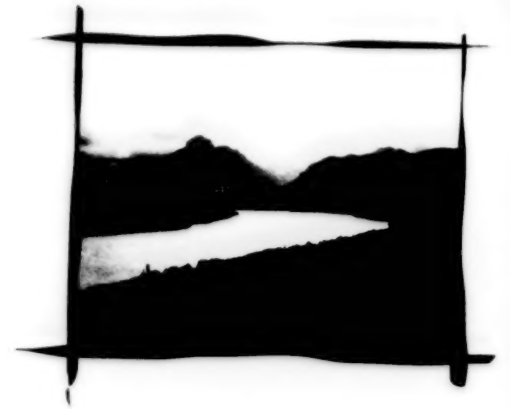
PHILOSOPHY: The North Fork would be preserved to contribute to the integrity and primitive character of the transboundary watershed. Management actions would reflect the importance of interagency and international cooperation. Visitor facilities would be rustic and would preserve a national park quality and style of development that has become increasingly rare. Management actions would preserve the area's primitive character.

and camping. Developments would include paved roads, pullouts, trails, entrance stations, exhibits, and parking lots.

The rustic zone would encompass the corridor of the inside North Fork Road and roads to Bowman and Kintla Lakes. It would be managed to provide informational and interpretive services such as exhibits and waysides. Cultural resources would be preserved. The inside North Fork Road would be managed as a motorized nature trail. The narrow width of the road and current approximate alignment would be maintained. Developments would include informational and interpretive signs, employee housing, ranger stations, campgrounds, sanitation facilities, small parking lots, trails and trailheads, small boat launching facilities, and paved and unpaved roads.

The backcountry zone would encompass the remainder of the North Fork area. It would be managed to maintain natural processes. Visitor use would consist primarily of hiking and camping. Visitors would be encouraged to practice "leave no trace" skills and ethics. Developments would include trails, primitive signs, campsites, primitive administrative facilities and sanitation facilities. Indicators and standards and a monitoring program would be developed to ensure that desired resource conditions and visitor experiences were achieved and protected.





Critical Issues and Alternatives Considered

Critical Issues Facing Glacier National Park

In addition to providing a management philosophy and the management area framework, the *Draft General Management Plan and Environmental Impact Statement* addresses several critical issues for the future of Glacier National Park. The public, other agencies, Indian tribes, special interest groups, and park staff identified these critical issues during this planning effort. They are:

- visitor use on the Going-to-the-Sun Road
- preservation of the Going-to-the-Sun Road
- preservation of historic hotels and visitor services
- scenic air tours
- personal watercraft (jet skis)
- winter use
- Divide Creek flood hazard
- west side discovery center and museum

The preferred alternative, favored by the National Park Service at this time, is identified for each of the issues. It is compared to other alternatives considered and evaluated in this document.

VISITOR USE ON THE GOING-TO-THE-SUN ROAD

Background. Traveling the Going-to-the-Sun Road is the premier park experience for over 80 percent of the visitors to Glacier National Park. It was built in the 1920s and 1930s, and in 1983 it was placed on the National Register of Historic Places. In 1985 it was declared a national historic civil engineering landmark, and in 1996 it was designated as a national historic landmark.

Because of its historic value, it is important to maintain its width, scenic vistas, and classic rock walls. Its character is part of a spectacular driving experience that should be preserved.

The Going-to-the-Sun Road is the only route directly linking the park's east and west sides, and its value is immeasurable. Each year hundreds of thousands of tourists are drawn to the area and drive this scenic route. Changes in access to the road could greatly affect local and regional economies.

Because the road is the only extensive automotive route through the park, it defines the basic circulation pattern. The road accesses principal points of interest and offers many stunning views. Use has increased from less than 40,000 cars in 1933 to over 660,000 cars annually. High traffic volume is causing overcrowding at pullouts and parking areas along the road. Visitors pull off and park in undesignated areas, causing resource damage and safety problems. Current pullout locations may not allow access to desired areas.

Issue. In July and August the Going-to-the-Sun Road approaches its peak capacity. Traffic is congested, and demand for parking often exceeds available spaces. In 1994 a visitor use study showed that 43 percent of summer visitors felt that traffic congestion and parking shortages detracted from their visits, and many felt that this was unacceptable.

"Red coach" public transportation has been available on the Going-to-the-Sun Road to visitors who arrive without vehicles, with overlength vehicles, or who do not want to drive. Early in the history of Glacier National Park, a shuttle service was initiated to serve the visiting public. Some people believe that the shuttle system has not been effective because of high cost, limited capacity, and a limited schedule. Others think that the shuttle system works well but would like to see it expanded to increase its usefulness. The management challenge is to continue private vehicle use, as desired by the public, while improving transportation services.

In recent years bicycle use has become popular in the park. Bicycles present a safety hazard when combined with heavy automobile traffic on narrow sections of the road without shoulders. The challenge is to manage all the visitor uses while maintaining the traditional driving experience, ensuring the safety of users, and retaining the historic character of the road.

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Alternative A: Expand Visitor Opportunities

The National Park Service would continue to manage the Going-to-the-Sun Road as the premier experience of Glacier National Park. The preferred alternative would be to continue to manage the road as an interpretive trail. Focus would remain on maintaining the character of the road, which contributes to its national landmark status, as well on the experience of driving through the heart of Glacier National Park. This alternative would retain the freedom of choice for visitors to drive personal vehicles and stop at various viewpoints along the road.

For visitors who require or would prefer to use a transportation system, an efficient and convenient public system would be provided. A study would determine how best to implement the system. Past systems have not been economically viable, so a government subsidy might be necessary. Further analysis would be done to determine whether parking facilities for the shuttle system would have to be provided inside the park. If so, the parking facilities would be developed according to the management goals of the Going-to-the-Sun Road corridor.

To alleviate crowded conditions at Logan Pass, use would be dispersed along the length of the road. More places for visitors to pull off, park, and take short walks would be provided. Protection of the road as a national historic landmark would be ensured. Past actions along the road have included removing pullouts and turnoffs to improve safety and restore the road's historic width. Reducing the number of places that visitors could stop and park along the road has probably contributed to the congestion and parking problems at areas such as Avalanche and Logan Pass.

Actions to be taken:

- assess an expanded transportation system
- identify additional pullouts
- retain tour services
- restrict bicycle use during peak periods
- retain vehicle length and width restrictions

Alternative B: Expand Logan Pass

This alternative would address the issue of increasing use and congestion by constructing a larger parking lot at Logan Pass either underground or aboveground. Logan Pass is considered the primary destination and attraction for most visitors to Glacier National Park.

Actions to be taken:

- continue to correct safety problems and to reduce or eliminate the pullouts and turnoffs
- expand Logan Pass parking area
- retain shuttle service
- retain bicycle restrictions during peak periods
- retain vehicle length and width restrictions

Alternative C: Status Quo

The National Park Service would continue to manage the Going-to-the-Sun Road as the principal way for visitors to experience the park. Private vehicle use would continue. No change in road capacity, design character, or day use would be made in the corridor. Policies of past years would continue, and the following actions would continue:

- correction of safety problems and reduction or elimination of pullouts and turnoffs
- shuttle service
- red coach transportation service
- bicycle restrictions during peak periods
- vehicle length and width restriction

The preferred alternative is alternative A because it offers the best way to manage increasing use while protecting resources and without limiting the number of cars. This alternative retains the historic visitor experience while providing more opportunities to stop and enjoy the park. It also offers the best way to manage congestion at Logan Pass and other popular areas.

Impact Synopsis

Impacts on air quality, energy consumption, and noise levels would increase as use increased. Construction actions required to implement the various alternatives would impact both wildlife and vegetation at specific locations throughout the corridor. Construction at Logan Pass would impact areas of alpine vegetation that have not been previously disturbed. Cultural resources would remain unaffected.

PRESERVATION OF THE GOING-TO-THE-SUN ROAD

Background. Since the road was completed in 1933, the upper elevations have not been substantially repaired. Today, that section of the road is in need of major rehabilitation. In the past 15 years, seven road projects have been funded in Glacier. Approximately \$18 million has been spent to complete work on 20 miles of the road. The completed portions have mostly been in lower sections of the road; only 1 mile of the high-mountain section has been completed.

Issue. After the 1995-1996 Logan Pass reconstruction project, it was evident that funding levels were inadequate to ensure long-term use of the Going-to-the-Sun Road. Visitors experienced long and frustrating delays, and contractors had difficulty repairing the road and maintaining traffic. The experience at Logan Pass led Federal Highway Administration engineers to conclude that approximately 50 years would be needed to finish repairing the road if the current approach were used. It is likely that some segments of the road would fail during that time and it would not be possible to keep the road open consistently. The heart of the issue is that road construction can only be done in summer and fall, which is when most visitors experience the park.

The National Park Service and the Federal Highway Administration have jointly developed alternatives for a road reconstruction program based on the following criteria:

- preserve the historic character and significance of the Going-to-the-Sun Road
- minimize impacts on visitors
- minimize impacts on the local economy
- perform needed repairs before the road fails
- minimize the cost of the reconstruction
- minimize impacts on natural resources

There are approximately 30 miles of the road that still must be reconstructed. An 11-mile critical section was identified and studied as the controlling element in any long-range program to repair the road. The alpine section between the west side tunnel and Siyeh Bend (on the east side of the Continental Divide) is the most spectacular part of the road and was determined to be in the most critical need of reconstruction. Reconstruction on this section has the greatest potential to impact both visitors and the local economy. There are many historically significant stone masonry features, including 119 retaining walls and 3 miles of guardwalls. The narrow road corridor, short construction season, and extreme weather conditions affect both the integrity of the road and the reconstruction effort. Avalanches, snow creep, and repeated freezing and thawing continually deteriorate road features and jeopardize public safety.

The three alternatives that follow describe options for a comprehensive plan for reconstructing the Going-to-the-Sun Road and upgrading visitor facilities for the next 10-20 years. The work included in each of the alternatives covers both the 11-mile alpine section and the other 19 miles of lower elevation sections on the east and west sides below the alpine section.

Alternative A: Fast-Track Reconstruction (4-6 Years)

In this alternative a 4-6 year reconstruction scenario would be necessary for rehabilitating the road and repairing the historic stone retaining walls. During this period, Logan Pass would remain accessible from one side or the other, but there would be no through traffic. For two years the road from Avalanche to Logan Pass would be closed, then would reopen while the section between Logan Pass and Rising Sun closed. Logan Pass would remain open to the public during the construction period but only from one side at a time; travel across the park would not be possible.

A west side staging area at Logan maintenance pit and an east side staging area at Sun Point would be required for the contractors' operations. The total cost of this alternative is \$70-\$85 million, which is significantly more than the average \$2 million per year that is currently expended on Glacier's road reconstruction program. Accelerated construction with total road closure would probably start no earlier than 2004 because of the need for extensive engineering design and early contracts for material production and stockpiling. The need to schedule around the state's Lewis and Clark Bicentennial celebration is also a major consideration.

Alternative B: Accelerated Reconstruction (10± Years)

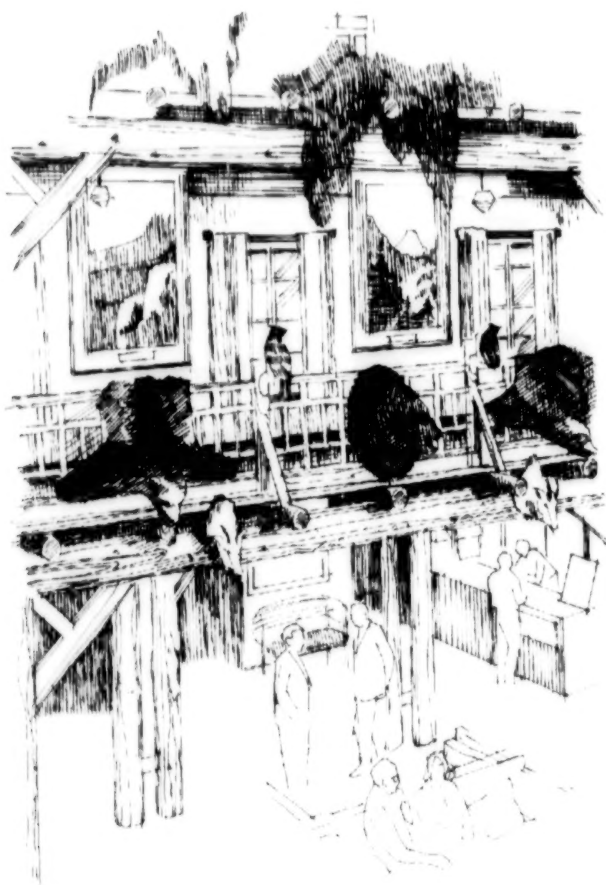
Under this alternative 10± years would be required to complete all of the repair work. A variety of road closures would be needed, including night closures for excavation and hauling large quantities of materials. There would be limited daytime closures and delays due to one-lane closures. Alternating one-way traffic across the Going-to-the-Sun Road would be accommodated for an entire season. Full closure after Labor Day could also be required.

There would be staging areas on both the west and east sides for construction operations and storage of materials. These areas would probably be at Logan maintenance pit and at Sun Point. This alternative is estimated to cost approximately \$90-\$105 million during the 10± years of work, significantly more than the average \$2 million per year that is currently expended on road reconstruction in Glacier. Accelerated construction using the partial closures would probably start no earlier than 2004 due to the time required for the major engineering design, the early contracts for material production and stockpiling, and the need to schedule around the state's Lewis and Clark Bicentennial celebration.

Alternative C: Status Quo

The current level of road reconstruction would continue. Approximately \$2 million would be spent annually. It would take approximately 50 years and \$195-\$210 million to complete repair of the road. It would retain visitor use of the Going-to-the-Sun Road during construction to the extent possible. It would rely on a series of small, site-specific construction projects spread out over time. Before all required improvements could be completed, the sections completed earlier would have deteriorated and additional rehabilitation would be required. There would be construction on some part of the 52 miles of road at all times because the rate of deterioration would exceed the rate of improvement.

The National Park Service prefers an alternative that preserves the historic character of the road, completes the repairs before the road fails, minimizes impacts on natural resources, visitors, and the local economy, and minimizes the costs. Based on the best available information, alternative A appears to best satisfy those criteria. If new data reveals a solution that would better respond to the criteria, a different alternative would be selected in the final plan.



Impact Synopsis

For the two action alternatives, preservation of the road as a national historic landmark would be ensured. For the status quo approach some loss of historic elements of the road, such as stone walls, would be expected, and it is likely that the road would fail before the construction was complete. For all alternatives the road would continue to serve the visiting public. Impacts on vegetation and wildlife would be confined to the period and location of construction and mitigation would reduce the impacts on most resources. Grizzly bears might be temporarily displaced during construction.

PRESERVATION OF HISTORIC HOTELS AND VISITOR SERVICES

Background. Glacier has a long tradition of visitor service and hospitality. Early visitors came by train and then traveled by tour boat to Lake McDonald Lodge. They arrived first by stage and then by automobile at the Many Glacier Hotel. Early in the park's history the many chalets allowed visitors to stay overnight in the backcountry. Later lodging was provided at Swiftcurrent, Rising Sun, and Apgar. Much of the original lodging is gone, and what remains is recognized as historically significant. Three of the remaining buildings $\frac{1}{4}$ Many Glacier Hotel, Lake McDonald Lodge, and Two Medicine Chalet $\frac{1}{4}$ have been designated as national historic landmarks. These and many other structures are listed on the National Register of Historic Places.

Issue. About 100 historic structures are operated by the concessioner and provide for lodging and food services. All these structures require some level of rehabilitation to address deficiencies and to keep them functioning as visitor accommodations over time. The deficiencies must be addressed if the concessioner is to continue to provide services in a safe, healthy, and acceptable manner. Rehabilitating the structures would be expensive. Several solutions have been considered over the past 10 years, and cost estimates vary depending on the approach taken to correct the problem. If the estimates are updated for inflation, the cost could be close to \$100 million to rehabilitate the historic hotels, lodges, and other facilities.

Investigations are ongoing to determine which engineering and architectural repairs are necessary. The cost of solutions has been estimated at \$80-\$100 million to rehabilitate the historic structures and the concession facilities throughout the park.

Lake McDonald Lodge is the oldest guest lodge in the park and has been designated as a national historic landmark. It provides 100 guestrooms of varying types, two restaurants, a lounge,

gift shop, and a small post office. It was partially renovated in the 1980s, but much remains to be done. Some facilities do not meet current fire and electrical codes, pose risks from asbestos, and are not accessible to people with disabilities. Parking is inadequate. The 1960s-era restaurant is poorly located and architecturally inappropriate to the historic district. The facilities and utility systems are not winterized. Many of the employee dorms are not adequate to meet current needs. Estimates for improvements are \$23-\$36 million.

The Many Glacier Hotel provides 211 guestrooms and a restaurant, lounge, gift shop, and small grocery. The development surrounding the hotel is listed as a historic district on the National Register of Historic Places. The hotel has been designated a national historic landmark. The facilities have many problems, including electrical systems that do not meet modern fire codes; failing structural elements such as exterior balconies, walls, floors, and foundations; inadequate and inefficient heating systems; asbestos hazards and bat infestations; inadequate utility systems, poor pedestrian circulation; and no access for people with disabilities. There are no operable elevators; rooms have undersized bathrooms and no soundproofing or insulation. Employee housing is inadequate. Improvements to address these concerns would cost \$35-\$48 million.

Swiftcurrent Motor Inn developed area is also a designated historic district. It provides 62 motel units, 26 cabins without bathrooms, a restaurant, a campstore, public showers, and a laundry. Problems identified include possible asbestos hazards, inadequate public shower facilities, inadequate access for people with disabilities, and poor pedestrian circulation. Improvements to address these concerns would cost \$3-\$8.3 million.

Rising Sun Motor Inn developed area is largely a designated historic district. The motor inn includes 37 motel rooms and 35 cabins, a restaurant, a campstore, and public showers. Problems include inadequate access for people with disabilities, structural deterioration, and possible asbestos hazards. Estimates for improvements to the Rising Sun area are \$5-\$10 million.

Two Medicine Chalet is designated a national historic landmark and currently houses a campstore and snack bar. Recognized problems include asbestos, accessibility, and structural corrections would cost about \$600,000.

The Village Inn is a government-owned 36-room motel on the shore of Lake McDonald. Shoreline erosion threatens the integrity of the motel and presents a hazard to guests. No cost estimate is available.

The National Park Service would ensure the preservation of the national landmark properties and the other historic lodging in Glacier National Park. Congressional appropriations would be



Alternative A: Rehabilitate National Landmark and Other Historic Visitor Facilities

sought for rehabilitation. This approach would encourage historic preservation and continue the tradition of hospitality at Glacier. A detailed analysis of lodging would be undertaken to determine the overall capacity, location, and appropriate mix. Since rehabilitation could result in a reduction in the number of rooms (for example, installation of elevators for accessibility would eliminate some rooms), some increase in the number of rooms would be allowed.

Actions to be taken:

- conduct a new structural analysis where required
- develop site-specific design plans for all properties
- develop a commercial services plan
- rehabilitate all structures
- upgrade utilities, concession employee housing, and infrastructure where required
- upgrade the visitor accommodations to better meet expectations
- provide access for people with disabilities at all facilities
- evaluate the Village Inn

Alternative B: Status Quo

The current course of action would continue. The concessioner would continue to invest a minimum of 6 percent of the annual gross receipts in capital improvements to park facilities (roughly \$600,000 annually) and an equal amount in maintenance of the facilities. Repairs and piecemeal improvements would continue, and operations would proceed until visitor health or safety was compromised or viability of the operations suffered. As the buildings age and continue to deteriorate, capital improvements and general upkeep would fall farther behind. Guest satisfaction would continue to decline. At some point the concession would become unprofitable and would cease to operate, or the buildings would deteriorate to a point where life safety issues would result in their closure. Overnight lodging would no longer be provided in the park or would be limited.

Actions that would be continued:

- maintain historic facilities and make repairs to correct health and safety deficiencies as funding allows
- retain visitor facilities and accommodations as long as possible

The preferred alternative is A because it provides for the preservation of these important elements of the park's history and continues needed visitor services.

Impact Synopsis

The largest impact would be under alternative B if the eventual loss of national landmark and national register properties resulted from insufficient funding for repairs. In the preferred alternative, the historic properties would be rehabilitated. The impact on the natural environment would be minimal since rehabilitation would consist of actions taken within the already disturbed area. Bald eagles may be disturbed at Lake McDonald as a consequence of rehabilitation actions taken at the Lake McDonald Lodge. No other impacts are expected to threatened or endangered species.

SCENIC AIR TOURS

Background. Commercially operated scenic air tours began in the early 1980s in Glacier with one vendor. There have been as many as five or six vendors, primarily on the west side, who advertised scenic air tours or offered to fly visitors over the park.

The Federal Aviation Administration regulates aviation throughout the United States, including the airspace above national parks. The National Park Service and the Federal Aviation Administration are developing regulations to guide aviation activities in national parks.

Issue. For some park visitors, including those who have disabilities, flying over the park can be a wonderful way to experience the grandeur of Glacier's interior. For others, aircraft are a noisy, unwelcome intrusion on their park experience. Scenic air tours are not the only way that visitors can experience the grandeur of the park. An available alternative is the Going-to-the-Sun Road, which was built to provide access to the interior of Glacier for those unable to hike or ride horseback. Before the road was built, Glacier was available only to those who had the time and physical and financial ability to see the park's interior. The road made Glacier National Park available to all; it offers a singular experience that is actually comparable to seeing the park by air. The unparalleled



heights and spectacular vistas along the road have thrilled visitors for decades. Most importantly, this experience is available to everyone, including the elderly or those unable to hike into the back-country.

Scientific research completed elsewhere has concluded that airplanes and helicopters flown near the ground cause disturbance to wildlife. This disturbance is detrimental or harmful when wildlife panic, stampede, or abandon nesting or hunting sites. Research has not been done in Glacier to determine at what altitude aircraft might operate that would result in no harm.

Alternative A: No Commercial Sightseeing Tours over Glacier National Park

Glacier's enabling legislation states the park is to be "for the benefit and enjoyment of the people" and should be regulated to provide "for the preservation of the park in a state of nature ... and for the care and protection of the fish and game within. ..." While commercial sightseeing tours benefit some visitors, they reduce the enjoyment of others. Such air tours may not meet the affirmative responsibilities to preserve a "state of nature" or to properly care for or protect park wildlife. Therefore, under this alternative, the Federal Aviation Administration would be requested to prohibit all scenic air tours over Glacier National Park.

Actions to be taken:

- request that the Federal Aviation Administration prohibit all new scenic air tour operators who would operate over Glacier National Park
- develop a plan with the Federal Aviation Administration and the public to phaseout current commercial operators over time to achieve the alternative

Alternative B: Allow Commercial Sightseeing Tours only in Certain Parts of the Park

To preserve Glacier "in a state of nature" and yet provide for public enjoyment of the park, it might be appropriate for scenic air tours to be available over some portions of the park. Such use might be appropriate only over the portion of the park that is heavily used in order to preserve natural state in the wilder portions.

Areas selected would reflect the desires of the majority of the visitors. For example, the National Park Service (through the Federal Aviation Administration) might permit tours over the Going-to-the-Sun Road corridor and east of the Continental Divide over the Many Glacier Valley. The National Park Service would request that the Federal Aviation Administration prohibit scenic air tours over the North Fork, Middle Fork, Two Medicine, and Goat Haunt-Belly River areas because of their wild character and because visitors are especially able to experience solitude in these portions of the park.

Actions to be taken:

- work with Federal Aviation Administration to manage scenic air tours over some parts of the park and prohibit them over others
- develop a scenic air tour management plan

Alternative C: Status Quo

Scenic air tours would continue in Glacier National Park under the authority of the Federal Aviation Administration. Recommendations (such as flying 2,000 feet above ground level) would continue, as would the FAA emphasis on safety to protect the visitors using the tour services. The numbers of commercial operators would be determined by the marketplace as a result of supply and demand, not by park values. The National Park Service would monitor impacts on park values and would request that the Federal Aviation Administration require measures that would mitigate the negative impacts.

Actions that would continue to be taken:

- continue informal monitoring of air tour activity throughout the park
- monitor impacts on park values and work with the Federal Aviation Administration to mitigate negative effects

The preferred alternative is A, to prohibit all commercial sightseeing flights over the park. The park has values and significance that should be considered before any visitor use would be allowed that could impact traditional national park recreational activities. Scenic air tours operating in backcountry areas where peace and solitude are important diminish the visitor experience. Wildlife populations might not be directly

affected, but the effects on some animals have been documented, and the effects of indirect disturbance are unknown. Because the park is mandated to regulate use to preserve these resources in a state of nature, until such time as the aircraft industry can prove that their activity poses no harm to park resources, scenic air tours should be prohibited.

Impact Synopsis

The impacts of scenic air tours are primarily on wildlife and visitor use. No impact is anticipated on cultural resources. An impact on wildlife and natural quiet would result from continued air tours. Gray wolves, bald eagles, and grizzly bears could be disturbed by continuing overflights, particularly by helicopters at low levels. Prohibiting scenic air tours would deny some visitors the opportunity to experience the park in this manner.



PERSONAL WATERCRAFT

Background. Personal watercraft are small vessels that use inboard motors powering water jet pumps. They are known by such trade names as Jet-Ski, Waverunner, and Sea-Doo. Personal watercraft are high-performance vessels, are designed for speed and maneuverability, and are often used to perform stunts. They typically have 50-100 horsepower (hp) and are capable of traveling more than 60 mph. Under park regulations, all boats with motors over 10 hp are prohibited on all but Lake McDonald, St. Mary Lake, Lake Sherburne, and Upper Waterton Lake.

Issue. Personal watercraft use has increased dramatically nationwide. In 1996 Glacier implemented a temporary prohibition on personal watercraft in the park. This ban was intended only as an interim measure pending review of the issue in a general management plan. Waterton Lakes National Park banned personal watercraft in 1994 because local residents felt that they were inappropriate in the park and interfered with other boaters.

Use of personal watercraft is being considered in the *Draft General Management Plan and Environmental Impact Statement* because when the temporary ban was initiated in 1996, it included a commitment to further study the issue (including public input) before a permanent strategy was put into place. It is the policy of the National Park Service to prohibit personal watercraft unless specifically authorized by a park superintendent.

Alternative A: Ban Personal Watercraft on All Park Waters

All personal watercraft would be permanently banned from the park. This regulation would be placed in the Code of Federal Regulations. This alternative would preserve the natural quiet and the opportunity for solitude on all park waters.

Actions to be taken:

- make the temporary ban on personal watercraft permanent

Alternative B: Status Quo

This alternative would lift the temporary ban on personal watercraft and would permit their use where boats with motors of 10 hp or more are allowed. Personal watercraft would then be allowed on portions of Lake McDonald, St. Mary Lake, and Lake Sherburne. Personal watercraft would be subject to the same regulations regarding safety and noise as other boats on these lakes.

Actions to be taken:

- lift temporary ban on personal watercraft
- prepare regulation to allow use of personal watercraft on portions of Lake McDonald, St. Mary Lake, and Lake Sherburne that are open to other motorboats

The preferred alternative is A, which would permanently ban personal watercraft and similar vessels from all park waters. The National Park Service considers use of personal watercraft to be inconsistent with the purposes for which the park was established. The National Park Service is mandated by the Organic Act and other laws, regulations, and guidelines to ensure "the preservation of the park in a state of nature . . ." and to protect natural and cultural resources. The use of personal watercraft is contrary to preserving a state of nature and protecting resources.

Impact Synopsis

The impacts would be positive, primarily on wildlife and visitor use. Aquatic resources and wildlife would benefit from a ban on personal watercraft. Bald eagles are known to be disturbed by

boats, and gray wolves and grizzly bears could be disturbed as well. A ban on personal watercraft would reduce the potential for disturbance of threatened and endangered species. However, some visitors would be denied this recreational opportunity if a ban were imposed. No impact on cultural resources would result from either alternative.

WINTER USE

Background. Glacier National Park has long provided for visitor use in winter. Quiet recreational activities such as camping, cross-country skiing, snowshoeing, and hiking have long been part of the enjoyment of the park in winter.

Issue. Increasing development and expanding regional populations will probably result in more winter use of the park. Increasing summer visitation has encouraged many visitors to visit the park during fall, winter, and spring. During winter, parking at the head of Lake McDonald becomes congested on many weekends. Winter visitor numbers are not high; however, a plan for increased use is needed.

Alternative A: Prepare for More Winter Day Use

This alternative would respond to the potential increase in visitors during the winter by preparing for increased use. Opportunities would be expanded for day users as winter visitation continues to increase.

Actions to be taken:

- plow only to Lake McDonald Lodge and provide parking
- plow the road to the 1913 Ranger Station and provide parking
- allow a facility to provide snacks and possibly ski rentals
- plow parts of the Camas Road and provide sanitation facilities and parking
- plow the Two Medicine and Many Glacier Roads to the park boundary, provide parking and sanitation facilities
- monitor wildlife impacts

Alternative B: Expand Winter Opportunities to Include Overnight Accommodations

To prepare for increased winter use of the park and to provide a winter experience not found elsewhere in the region, Glacier National Park would support certain day use activities and plan for overnight accommodations in some areas of the park. These would be provided when demand increased and they became economically feasible.

Actions to be taken:

- evaluate the feasibility of opening Lake McDonald Lodge and the Village Inn for winter use
- plow road to Lake McDonald Lodge and Rising Sun Motor Inn, where adequate parking already exists
- open campstores
- plow parts of the Camas, Two Medicine, and Many Glacier Roads and provide parking and sanitation facilities

Alternative C: Status Quo

Glacier National Park would continue to offer a winter experience to day users and to those who choose to go into the backcountry overnight. As use increased, the park staff would react to visitor needs or resource concerns.

Actions that would continue to be taken:

- plow road to the head of Lake McDonald and to Rising Sun as weather and snow depth allow
- provide sanitation facilities and trailhead information

The preferred alternative is A, which would prepare for a potential increase in winter use by providing improved parking facilities and designated parking areas. Overnight accommodations would not be opened due to the excessive cost of winterization, questionable economic viability, and possible impacts on wildlife. In addition, the National Park Service is concerned about future demands associated with opening these facilities in the winter, including requests for snow coaches. Not providing winter overnight facilities is also more in accordance with the overall management



philosophy. Critical wildlife wintering areas would be avoided, particularly at St. Mary. Using the Lake McDonald parking lot would allow more parking and easier plowing, permit day use of the campstore, and provide more skiing and snowshoeing opportunities in safer terrain using the trails in the area as well as the road.

Impact Synopsis

The alternative of increasing winter use opportunities, including overnight accommodations, would cause the most impacts. Wildlife disturbance would increase with additional use in winter. This disturbance would include bald eagles, gray wolves, and grizzly bears, so increases in use would proceed with caution in areas where there is winter wildlife activity, and wildlife impacts would be monitored. Winterization of some lodges would be undertaken, which could have a positive effect on the historic properties. Accommodating overnight use in the winter would provide visitors with an experience that is not currently available.

DIVIDE CREEK FLOOD HAZARD

Background. At St. Mary the administrative, historic maintenance, and employee housing facilities are in the flood hazard zone of Divide Creek and are subject to dangerous floods that risk life and property.

Issue. There are facilities, including housing, in a flood hazard zone. To ensure safety Divide Creek is being manipulated, which is in conflict with National Park Service policy.

Alternative A: Relocate Structures Out of the Floodplain

Development, including employee housing, the administration building, and the historic maintenance facility, would be relocated. These structures would be moved out of the flood hazard zone of Divide Creek to a site inside or outside the park. Alternative locations and the cost of moving the facilities would be explored. Housing and administrative facilities could be separated from the maintenance facilities.

Actions to be taken:

- determine a location for the facilities
- seek legislative authority and acquire property if the selected location is outside the park
- design and construct replacement housing and administrative and maintenance facilities
- remove floodproofing and all structures and allow Divide Creek to follow its natural channel
- determine minimal facilities needed for park operations

Alternative B: Channelize Divide Creek

An engineering solution to the flood hazard at Divide Creek would be sought. This would protect development against future floods to the extent possible.

Actions to be taken:

- obtain necessary permits from the Blackfeet Indian tribe and other agencies
- channelize the necessary section of Divide Creek

Alternative C: Status Quo

The National Park Service would continue to maintain a monitoring program to ensure human safety and to protect park facilities at Divide Creek and other locations. However, no action would be taken to remove facilities from the flood hazard area.

Actions that would continue to be taken:

- monitoring flood hazard
- maintaining flood wall of Divide Creek

The preferred alternative is A, which offers the best protection for resources, visitors, and park staff, and is in accordance with policy. Divide Creek is extremely unpredictable and would require massive stabilization. Stabilization, particularly of this magnitude, is in direct conflict with policy on management of resources. The safety of park employees, their families, and any visitors in this area cannot be adequately provided for in this area. Moving these facilities also provides the National Park Service with the opportunity to relocate operations to more convenient areas. Maintenance, housing, and administration would not have to be all in one place.

Impact Synopsis

Channelization of Divide Creek would cause impacts on wildlife, vegetation, and aquatic resources. No known threatened or endangered species would be affected. Removal and relocation of facilities from the flood hazard zone would adversely affect historic properties in the St. Mary maintenance area.

WEST SIDE DISCOVERY CENTER AND MUSEUM

Background. The *Draft General Management Plan and Environmental Impact Statement* addresses interpretation and the park's broader role in local and national outreach activities, types of interpretive facilities that may be needed and their general location, and ways to improve the storage of cultural and natural resource artifacts.

Issue. The need for an adequate west side discovery center has long been recognized. The visitor contact station at Apgar is difficult to find, lacks adequate parking, and is too small to serve the many visitors who use it every day during the summer. The facility at Apgar was meant to serve as a short-term solution. The result has been that the first visitor center many people see is at Logan Pass, which contributes to the congestion and the parking problems there. For over 20 years, a variety of west side visitor center locations both inside and outside the park have been studied and documented, but funding has never been obtained to begin construction.

The inventory of cultural artifacts has grown. Items are stored in scattered locations, not all of which are providing adequate protection. Some storage areas are inconveniently located, and access can be difficult. The collection will continue to grow. It requires adequate storage space with environmental and physical protection. By combining a new visitor center and the museum collection in one location, more public access to those items would be possible, and better protection would be provided.

Alternative A: Construct a West Side Discovery Center and Museum Inside the Park

This alternative would involve construction of a new discovery center and museum on the west side of the park. The facility would be built north of the T-intersection of the Going-to-the-Sun and Camas Roads. The discovery center would replace the visitor contact station at Apgar. It would

be a full-service facility and would offer information, interpretive programs, innovative exhibits, educational programs and museum space.

Actions to be taken:

- construct a west side discovery center and museum
- modify the T-intersection to improve traffic flow
- evaluate related visitor uses, services, and needs

Alternative B: Locate Discovery Center and Museum Functions Outside the Park

A discovery center and museum would be located conveniently outside of the west entrance. There might be an opportunity to pursue a joint operation with other agencies or to use an existing facility.

Actions to be taken:

- evaluate locations outside the park for a new facility, or adaptively use an existing facility
- consider a partnership with others

Alternative C: Status Quo

Information functions would remain at Apgar. The problems of this facility would continue. It is too small, parking is inadequate, and it is difficult for visitors to locate.

Actions to be taken:

- retain the information center and visitor contact station at Apgar

The preferred alternative is A. A west side discovery center and museum is needed to provide visitor information and education for the more than 60 percent of the visitors to the park who enter through West Glacier. Because it is not easily located and is too small, the Apgar visitor contact station does not attract or adequately serve the public.

A new discovery center would be best located along the main park road where most visitors entering the park can easily access the facility. The area north of the T-intersection area is favored because the facility could be built adjacent to current development. The facility would be within walking distance of Apgar.

Impact Synopsis

Construction of the west side discovery center and museum would result in localized impacts on natural resources, including a loss in vegetation and disturbance to wildlife. No known threatened or endangered wildlife species would be affected. Mitigation would be developed to avoid adversely affecting a state-listed rare plant species. Cultural resources would not be disturbed by any of the three alternatives. Museum collections would be benefitted by alternatives A or B. The provision of enhanced visitor services either inside or outside the park would benefit visitors.



Biosphere Reserve



Waterton-Glacier
International Peace Park
World Heritage Site



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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